Factors Associated with Treatment Adherence among Pulmonary Tuberculosis Patients in New Delhi

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Abstract: Introduction: Tuberculosis is a global public health emergency, but it is particularly acute in India, which has the world's highest tuberculosis burden. Due to overpopulation, lack of sanitation, malnutrition, low living standards, and poor socioeconomic status, among other factors, it is India's most common infectious disease. The long period of treatment is one of the main reasons for considering it as a public health emergency. Consequently, there is an increase in patient noncompliance, which leads to treatment failure, adverse treatment outcomes, and deaths. This could lead to the growth of anti-TB drug resistance. According to the WHO, approximately 558 thousand new cases of Multi-Drug Resistance Tuberculosis were diagnosed worldwide, with 8.5 percent developed Extensively Drug Resistance Tuberculosis. Methodology: This study is a program-based cross-sectional descriptive survey of adult tuberculosis patients enrolled in the Delhi-based Revised National Tuberculosis Program. The study setting was 27 NTEP districts of Delhi. (N=65,893) and Sample size- was 200; the sampling method which is used in the study was the systemic random sampling method. Results: Most of the demographic factors (age, gender, residence, and family type) were not significantly associated with adherence; marital status was found statistically significant with the treatment compliance. Hesitation while telling people about the disease and motivation to strictly follow drug schedule by healthcare workers were other factors where a significant association with drug adherence was observed. The study findings also suggest that provision of food, minimal financial and other moral support from family, counseling, discussion and politeness by healthcare providers might also facilitate adherence. Discussion and Conclusions: For TB treatment, adherence, age, sex, socioeconomic status, types of accommodations, malnutrition, and personal hygiene should all be considered; similar results were observed in previous studies. In the care of TB patients, DOTS services, health workers, and family support play a significant role. According to the country's National Strategic Plan, the Indian government has set a goal of eliminating tuberculosis by 2025 and patients' compliance with TB care and treatment adherence is very crucial to achieve this aim. A cohort study will be able to give a better understanding of factors associated with adherence since this study may have missed some defaulters who were absconding and could not be reached. Important Terms: RNTCP, NTEP, DOTS, DS-TB, DR-TB, RR-TB, MDR-TB, XDR-TB, Treatment failure, Treatment relapse, Treatment adherence.

Keywords: treatment adherence, treatment relapse, treatment failure, drug resistance tuberculosis

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